THE

Journal *of* Home Economics

For those interested in Homemaking
Institution Management, and Educational Work in Home Economics

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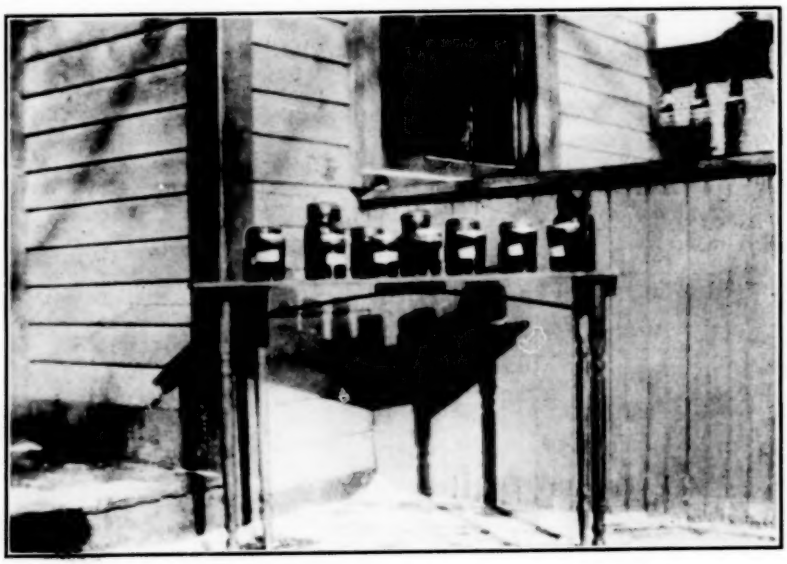

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THE
Journal of Home Economics

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MUNICIPAL HOUSEKEEPING[1]

MILDRED CHADSEY

Commissioner of Housing and Sanitation, Cleveland, Ohio

Housekeeping is the art of making the home clean, healthy, comfortable and attractive. Municipal housekeeping is the science of making the city clean, healthy, comfortable and attractive. Many tasks of housekeeping that were formerly performed by the individual householder are now performed by city officials. So gradually has the city taken over tasks that were once performed by the individual householders, and so many other tasks have been put upon it as it has grown into the complex and intricate thing that it is, and living in it has become such a co-related and interdependent process, that it is now confronted in a very real sense by the same problem on a highly magnified scale that confronts the individual housekeeper in making the home a clean, healthy, comfortable and attractive place in which to live.

Under modern conditions the homemaker does right to buy the household necessities, the furniture, the food, the clothes from the factory because they are made more cheaply and better there than she can have them made at home. She would be a social and economic failure if she did not adjust herself to the new industrial order of the factory system. She has not less human kindness and sympathy because she allows her sick to be cared for in the hospital, nor has she less maternal love because she sends her children out of the home to be educated. She merely recognizes that she is living in an age of

[1] Presented at the Seventh Annual Meeting of the American Home Economics Association, Cleveland, 1914.

specialization, and because she wants the best care and the best training for those she loves, she entrusts them to the care of specialists. It is not that she has failed to make home attractive that the older children seek their pleasure outside the home. It is because of their growing sociability, the result of the community life which leads them into broader fields of human interest and human endeavor than those set by the confines of the home. Such a home implies not independence, but interdependence. It establishes new bonds of human relationship, coördinated endeavor and community interests. Therefore many of the tasks that the individual housekeeper performed for her household have been projected into the community, both for the advantage of mutual service and of collective bargaining.

There is another reason than that of mutual advantage that makes us turn over to the municipality many of the tasks that the individual householders performed. It is because we have come into a fuller understanding that we are our brother's keeper. A broader humanitarianism than we knew of old makes us want to share more freely with the less fortunate city dwellers. It is not enough that we can buy for our families cleanliness and health and a degree of comfort. We want our brothers in the alley and under the hill to have the same advantage, and so we turn over to the city certain tasks to perform with the guarantee that it performs them alike for the rich and the poor. It is the twentieth century answer of the age old question "How can I share my brother's burden?"

The first and most important function of any housekeeper is to keep the home clean. The disposal of waste, such as garbage, rubbish, sewage, the cleaning of its street, the prevention of smoke and other noxious substances in the air, are all important measures in keeping the city clean. Yearly new methods of sewage disposal and sewage treatment are being devised by one group of experts while the dangers which result from failure to properly dispose of waste matter are being studied by another group. New problems in keeping the city clean are constantly presenting themselves for solution. Not only does the city in its effort to keep itself clean, establish departments that perform these duties, but it passes laws requiring individual property owners to maintain their premises in a cleanly condition and it restrains individuals from uncleanly acts, such as dumping refuse on streets or on other people's property, committing nuisances or expectorating on streets, and it employs inspectors whose duties it is to

enforce these laws. Some one has said that the same God that wrote the decalogues wrote the sanitary code. Surely an efficient enforcement of it is a God-like task, and one that is just about as difficult to perform as other God-like tasks are when performed by mere man.

In making itself a healthy place in which to live, the city has a graver task to perform, but one that is every day becoming easier of accomplishment because the science of public health is so rapidly growing. Contrast any health department of ten years ago with one of today. Then such departments were political pork barrels where any one who was owed a job was put to work granting burial permits or posting contagious disease cards on houses. Today these same departments have a staff of experts whose duty it is not only to control disease but to make an effort to prevent it; not only to decrease the death rate, but to make human life more tolerable. This marvelous advance in the efficiency of health departments has been the result of bacteriological discoveries that have made the control of disease possible and the elimination of many dread diseases, such as tuberculosis, hoped for. When we consider that as late as the seventeenth century, plague, pestilence and epidemics that desolated the population of great cities, were looked upon as mysterious agents of the evil spirit or of divine wrath, and when we realize that it was in the last part of the nineteenth century that the germ theory was discovered, and that we now hear even the proletariat talk freely about germs and microbe organisms, we can realize how rapidly this science has developed. Public health today is not only a science, it is a fad. Religions are based upon it and magazines enter the ranks of best sellers through articles about it. This popularization of public health is the result of the concrete example that scientists have been able to give the public. The transforming of the Panama Canal Zone from a fever-ridden area to a health resort by killing the malaria mosquitoes happened at a time when the interest of the public was centered on the zone and when such an act made possible the completion of the canal. Another example was furnished by the checking of the bubonic plague on the Pacific Coast by the extermination of the rats that carried it. It is now so easy to arouse a community, that was once entirely apathetic about filth and disease, into a concerted warfare against such common foes as mosquitoes, flies, and rats, that campaigns against them have become a commonplace, and newspapers no longer find news items in them. Such nuisances as foul privy vaults,

filthy manure boxes, muddy yards that were condoned and tolerated, are now recognized as the breeding places of disease, and those who are responsible for them are looked upon as foes to the community welfare.

When the public once grasped the fact that disease germs are transmitted through media such as air, water, milk and food, it demanded that these be safeguarded against infection. As a result, water purification, and the inspection of milk and meat and other food products are now considered essential parts of the city's housekeeping activities. Every city has inspectors covering the territory for miles around it to inspect the cattle who supply milk for the city in order to guard against the transmission of tuberculosis or typhoid fever in this way, and for the same reason every animal that is killed for human consumption is inspected by officials. Inspectors are at the market houses, at the bakeshops and at the canning factories, not only to see that food is prepared and handled under sanitary conditions, but that the ingredients which go into it are pure and wholesome. Every year sees new and more advanced requirements for the manufacturing of food. A few years ago, such sanitary laws would have seemed useless, but when we consider that today so much of the food comes into the home ready made, we realize the necessity of these laws.

Another housekeeping task that is placed in the health department is the auditing of vital accounts. It is no less important than the auditing of monetary accounts, for it shows us not only what our income in the birth rate is and what our outlay in the death rate is, but it shows us how we are using the income and it points out our useless expenditures. This is the new science of demography, the study of vital and social statistics. It does not confine itself to tabulating births and deaths. It takes account of what lies between. It raises the question of what does it profit us to add two years to the average length of life if life itself is not made more valuable. Death rate renders judgment as relentlessly as fate against congestion of population and insanitary dwellings, whether in the tenements of our city or in the alleys of our neglected neighborhoods. With never an error of judgment it points an accusing finger at a polluted water supply, an infected food supply or an infected house or individual.

It is difficult to distinguish what the city is doing for the sake of health from what it is doing for the sake of comfort, just as it is difficult to distinguish what it is doing for the sake of cleanliness and what

for the sake of health. To live is not all of life and to be healthy is not the underlying motive of many of our activities that make for health. Our various senses deserve consideration and so offenses to sight and smell are eliminated for no other reason than that they are offensive. Water supplies are protected and purified not only because polluted water causes disease, but because a glass of pure water is in itself a pleasure. Food supplies are protected, not only because contaminated food means that it is infected with germs, but because our sensibilities make us relish clean and wholesome food.

So it is with the housing of people in homes and in industries. If people are forced or permitted to live and work in dark and damp rooms, to use foul and insufficient plumbing, to overcrowd in insanitary quarters, they breed disease and vice that spread over the entire city just as infection spreads from any sore. Every city has a building code that sets certain requirements for new buildings. Due to the rapid growth of cities and to the failure to solve the rapid transit problem, there is an ever-increasing tendency to crowd buildings on lots and to crowd people into buildings, so that building codes have had to limit the amount of lot occupied, as well as the size of courts, and rooms, and have had to require a certain amount of light and ventilation and certain minimum toilet facilities. All of these things have been done in addition to prescribing standards of building materials and methods of construction that insure safety. Recently cities have gone further. They have passed codes setting certain requirements of comfort and decency for existing buildings. These codes have been accepted much more slowly than those that relate to new buildings because many owners feel that if their buildings conformed to the standards of the time when they were built, they should not now be changed. They do not grasp the meaning of the French proverb, "Your right ceases where your neighbor's right begins."

In passing laws that provide for decent and wholesome living and working conditions, the city is recognizing what Cato recognized so long ago when he said "Riches for the individual and poverty for the masses is the ruin of the commonwealth." It is recognizing that comfortable conditions for working and living will go far toward giving to the individual health of body and mind, the essentials for making him an independent wage earner rather than a public charge. We have only to go to the slums of some of our cities where human beings are floundering in an abyss of vice, disease, poverty and idleness, to see

whence come the human derelicts that will tomorrow pass through our courts and fill our public institutions. It is time that cities were recognizing not only the gross extravagance of such shortsighted methods, but the inhumanity of them. That they are recognizing this is evidenced by recent legislation. Twenty years ago not a city existed which recognized as a part of its functions that of making as comfortable as possible the conditions under which people must work and live. Today twenty-eight cities have legislation either actual or pending, to secure a minimum degree of comfort and decency in the living conditions of its citizens, and many cities are beginning to make some effort to insure more tolerable conditions for work. It is true that these laws are inadequate and are inadequately enforced, but they are indicative that the community is awakening to its responsibility to provide its people with reasonable safeguards for health and comfort. To do this, it must do more than pass housing codes that provide safe and sanitary homes, and work shop laws that provide safe and sanitary places for work. It must determine where factories shall be located and where homes shall be located. It is a lamentable fact that the majority of our homes are now placed where they are and are what they are because business has been the determining factor. We place the home near the factory so that the laborer is accessible to his work and we place the factory where it is because it is accessible to the docks, the railroads, the shops. What a sacrifice of the ends to the means! What an inversion of the elementary principle of life that we work as a means of living—not that we live as a means of working. The time must come when no factory can be located in such a way as to increase congestion of population, to destroy homes or to undermine health or blight the soul of man. That the municipality is responsible for the souls of men may be a new thought, but it is an old fact. What one of us has not seen the soul of the child die before it has been fully born because all about it was sordid and dismal? It is for this reason that the city planning commissions have ceased to interest themselves exclusively in the grouping of public buildings and the making of civic centers, and are limiting the heights of buildings and widths of streets so that tenement dwellers will not grope about in dark canyons. It is for this reason that they are becoming interested in establishing playgrounds and open space in the crowded quarters as well as in making a system of parks and boulevards that are accessible only to those who ride. The city recognizes that it is just as necessary to

provide light, sunshine, green spots, beauty in streets and buildings, as it is to provide for the disposal of waste or the control of disease; that it is just as essential to protect and foster the well being of the soul as the body of citizens, if the city would reckon its strength through the strength of its citizens.

Such are the tasks of Municipal Housekeeping. Can women, who for all ages have been the homemakers and the housekeepers of the race, be grateful enough that this is changing from an individual into a community task just at the time when women are being liberated from the chains of tradition and custom to a fuller participation in the events of life? It is doubly fortunate that their liberation coincides with the great democratic revolution that is abroad in the land today because they can take up the community tasks untrammeled by the demoralizing influence of political spoilsmen and class exploitation. Is it too much to expect that they will bring with them in the performance of their duties, courage such as John Stuart Mills had, when facing the electors of Westminster, and being asked whether he had ever said that they were "generally liars," replied simply, "I did."

THE PRESENT NEED FOR EDUCATION, FOR STUDENTS OF COLLEGE AGE, IN THE PROBLEMS OF FAMILY LIFE

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The remark has so frequently been made as to be almost a truism that the current age is distinguished by a heightened degree of social consciousness. By this is meant that intelligent men and women are becoming increasingly aware of their intimate relationships to the group life and at the same time are more sensitive to the mistakes, the needs, the reconstructive ideals growing out of the common social experience.

Ever since the second decade of the nineteenth century, when Auguste Comte wrote his Positive Philosophy with the intent to show that the betterment of humanity could only be brought about by the application of exact, scientific knowledge to the control of social experience—ever since that time enlightened criticism has been brought to bear upon well nigh every institution of society. Church, state, the law, the economic system, education, each has come in

for its share of destructive criticism and constructive suggestion. But, until very recently, the institution of the family has escaped analysis and adverse comment. The reasons for this immunity are not far to seek. The family, being the institution with which the life of each of us is most intimately and continuously bound up, is for that very reason the social organization least likely to challenge our critical attention. Familiarity has accustomed us to its anomalies, its maladjustment to present social conditions, its traditional inequities. Hence we take it largely as a matter of course that, in several states of our Union, the mother who has borne a child and has carried the heaviest share of the responsibility of rearing it, is given no rights of guardianship in that child. Neither is our critical and moral sense profoundly disturbed when we learn that in parts of our land of liberty a married woman is still denied the right to control her own property and earnings. Again, the double standard of morality, which stamps with ignominy and shame the woman who falls from virtue while it bears lightly upon the man who commits a similar offense is so familiar as to arouse little hostile criticism. These inequitable customs have all the powerful sanction of age-long precedent. Excellent men and women in the past have lived and loved under these laws and practices and so we tend to accept and pass them on unquestioningly.

But the familiarity bred of usage is not the sole reason why the family has, until a few years ago, been fairly exempt from critical investigation. The fact that home and family life are associated with many of our deepest and tenderest emotional experiences has contributed much to their immunity from criticism. Indeed, when modern social writers began to turn their attention to this most ancient of all institutions and to point out its manifest imperfections with a view to their improvement, they were greeted with a storm of hostile comment. It is sufficient to remind readers of social literature of the bitter attacks made upon Mrs. Parsons' book, The Family. The author of this excellent study was not content to indicate certain points where the machinery of family organization was creaking loudest and seemed most in need of careful investigation, but she went further and suggested possible means of reducing friction. It was this constructive suggestion that brought forth an outburst of angry and, on the whole, unintelligent criticism—chiefly from the pulpit.

But, during the last five years, students of social history in the making cannot fail to have noted a gradual change in the attitude of thoughtful men and women toward all problems of sex and family life. There is evident today a disposition to analyze these difficult questions with impartiality and in the spirit of scientific investigation. This augurs well for the future; for, if the true function of intelligence be to effect more satisfying conditions of life, in the broadest sense of the term "life," surely every phase of human experience will profit by the beneficent influence of man's enlightened reason. "Let there be light," then, upon every nook and corner of the social life of man—the light of knowledge and constructive thought.

With respect to the family institution this campaign of enlightenment, conducted by the leaders of thought, should not rest content with educating adults to an appreciation of existing evils. It has an even more important office to perform in the instruction of youths and maidens, the homemakers of the future, in order that they may avoid some of these mistakes of their forebears. To this end there should be wise education in the facts of sex life and reproduction, as well as an awakening of the conscience of the nation's youth to a sensitive regard for the social obligations involved in marriage. Is it not an amazing fact that the majority of parents permit their children to form their ideas of the marriage relation almost wholly from the chit-chat of adults and the frequently sentimental and unsound theories of fiction? The need of the age for young men and women who have been educated for their future dignified position as the founders of new households, the fathers and mothers of a future generation, is profound. Surely we cannot longer neglect our manifest responsibility to furnish this instruction.

Such an education would, of course, have regard to the training of girls in the science and art of homekeeping, in the knowledge of food values and food preparation, in understanding of the essential laws of hygiene and sanitation as applied to the home, in the appreciation of color, form and texture as these are related to house furnishings and dress. But it would likewise give honored place to courses treating frankly and scientifically the history and present status of the family, the problems involved in marriage and child-rearing in our present-day artificial society, and the whole difficult matter of sex life and sex relationships in both their personal and

their social bearings. Let young men and women be made acquainted, at latest during their college course, with the various solutions of these troublesome questions with which our social literature abounds. Let them be taught to face these solutions squarely, to analyze, understand, and evaluate them in the light of the general social welfare. If the students' sociological courses have been presented by teachers not only well informed but morally in earnest, sound social standards and a tender social conscience will have been developed to a greater or less degree within the class. Equipped with such weapons of defense, young men and women may safely read and estimate the diverse theories advanced by modern social writers possessing wisdom and unwisdom in various degrees. On leaving the college life for life more completely in touch with vital problems and realities, our graduates will be forewarned and forearmed. As intelligent members of society, actively concerned in its betterment, as future homebuilders, and parents, they need this intellectual and moral enlightenment. A thorough and impartial course on the development of domestic institutions and laws would do much to orientate the hostile critic of modern family conditions and render improbable the spread of that antagonism toward men as the "oppressors of womankind" which is even now too general among ill-informed persons. No one can study the history of the family in a liberal spirit without realizing that the narrow sphere of women in the past and the restrictions laid upon them were the outcome of economic and social conditions rather than the deliberate tyranny of man.

Higher institutions should remove the stupid taboo from these subjects, and should arrange intelligently planned and closely knit courses concerned with sex, marriage and family life in all their phases. These should be assigned to specially trained instructors whose exact and thorough knowledge is equalled by their moral enthusiasm. In such education lies the truest hope for the betterment of the race through the family.

THE HOUSEKEEPING CENTERS OF NEW YORK

MABEL HYDE KITTREDGE

President, Association of Practical Housekeeping Centers

Because there has been a definite recognition and growth in New York City of the housekeeping-center idea, a short history and reason for this growth may be of interest.

What is a Model Flat, or Housekeeping Center? It is the natural expression of the homemaking instinct which is in every girl. This instinct expresses itself first in making a doll's house, or in constructing out of chairs and shawls and with imagination a place large enough to be actually crawled into and be called a house.

Thirteen years ago, fourteen little girls and myself, acting on this homemaking instinct, made a real house out of four tenement rooms, situated in one of the most congested districts of New York. The way the walls were painted and the floors treated, the kind of curtains, the manner of furnishing, were the natural expression of that group's idea of beauty. Having furnished our home, the next step was to take up the study of homemaking in the same practical, personal way.

It mattered little to these small housekeepers that at the great colleges food values were being chemically worked out and domestic science taking its prominent place in the world. Windows were washed at the "Flat" (as it was called), until the best way to wash windows was found. The course in plumbing grew from the very interest that was taken in keeping the pipes of the bath room and the sink in a sanitary condition. Cooking was mastered, not by a scientific and proper balancing of food learned from any book or studied in any school room, but because dinners were served in the Flat. The girls planned the menu, did the marketing, cooked and served the meal to their own guests, and had all the enthusiasm and thrill of a hostess. Then they learned to wash dishes, and scrub the table, and leave the Flat absolutely clean—because they loved the work and loved the place they worked in.

The common, homely, housekeeping duties have become an art for two reasons: First, the world has waked up to the realization of the beauty in simple things. In the remarkable Altman collection of pictures at the Metropolitan Museum in New York, it is the woman peeling potatoes that attracts attention, not only for the perfection

of the work but for the charm of the subject. It is the every-day, homely acts of a woman's life that call out our admiration—the mother bathing her child, or the woman and man plowing in the field.

Health is the next reason why homemaking has stepped forward in the rank of science. Take one example: It is known now that the sweepings from our streets contain poison; that with the natural dirt of the streets—manure, soot and pavement dust—are mixed human sputum and the slobbering of animals, and that this mixture clings as mud to the boots and the clothing of human beings and is carried into the homes. There it dries, mixes with the air, and the dust and disease germs find a lodgment in the lungs of the occupants; or, after being pulverized by the action of traffic, this dust blows in through the doors, windows and cracks of our homes and must be removed before it can do its deadly harm. And so dusting, sweeping and cleaning the home have become acts of vital importance; they are the great preventives of disease, and no doctor in his laboratory working over his preventive measures is any more important than is the housekeeper who dusts with her damp duster, and dusts well.

Another seemingly simple, but really great, discovery that has been made is that children have an object sense, and that as they actually handle things their minds grasp the idea. Tell children forever about chemistry, even show them experiments with baking powder, soda, yeast and eggs, and they cannot adapt this knowledge to every-day life, but let these children work in the only kitchen that to them is a kitchen (one like home), let them mix the muffins and the cake, and test the oven, and see the effect of baking powder, and why it can be reduced in quantity if an egg is put into the muffin as well, and the lesson will never be forgotten, because their hands have worked out the problem for their minds.

We all want real things. A little child will play with the kitchen-garden tools for a few months; the doll's bed, the tiny dishes, the game of how to wait on the door, please for a while, but then the girl throws away these childish things and wants to play house in the real way. And so New York is giving her these real natural tools to work with. The housekeeping center at 226 Henry Street is now a part of the nearest public school at Jackson and Monroe streets. The pupils of that school in groups of fifteen fill the model home from nine until three; and the Board of Education pays for the teacher. Three groups a day walk from the school to the flat and actually keep house for

eighty minutes. Sometimes it is a cooking lesson, at other times they scrub and clean. The question of garbage is so thoroughly understood, and the responsibility of each individual, that those girls know that the Street Cleaning and Health Departments are helpless to do this cleaning-up work alone, and each girl is taught what her part is in this garbage disposition work.

Public School 7, at the corner of Hester and Christie streets has, with the aid of the Housekeeping Association, actually built a model of a home in the school building. Nothing is lacking from the kitchen, the bedroom, the living-room or the bath room equipment; and there every week over two hundred pupils study the great homemaking problems.

Next door to Public School No. 4 Manhattan, on Ridge and Rivington streets, an ordinary tenement-house flat has been fitted up and made into a model and homemaking laboratory for the pupils. This flat was entirely furnished by the girls. When the time comes for any one of them to have a home of her own she will know how to make everything from the curtains to the cleaning cloths, because she has done the work in the school home. The Housekeeping Center at 162 Sullivan Street, which has for so many years been the model and the workshop of that Italian neighborhood, is now to be connected, during school hours, with Public School 38, four blocks away. After school and every evening the old neighborhood work will go on as usual. The neighbors would not get their vegetables canned or their fruit put up for the winter without that Center.

School No. 4, in the Bronx, has its Housekeeping Center, and two other large public schools have permission to install these natural home plants next door to the school building. No longer is the instruction without the scientifically trained teacher. Only those who know the great laws of food and of sanitation so well that they can make them a part of every-day life can teach in the Model Flats, which belong to the Association of Housekeeping Centers and New York Public Schools.

At last the girls of our schools are to have what they want and what they have always wanted, because we grown-up people have learned our lesson, that if we will let them use their hands in a natural way their minds will take in the lesson we want to teach.

CREDIT FOR HOME WORK

HETTIE M. ANTHONY

Missouri State Teachers' Association

Among the first to make use of school credits for home work was Mr. Alderman of Oregon, who made this a method of bringing the school and home in closer touch and helping the children to realize that work done at home had dignity, and was as well worth while as school work.

He says:

The idea of giving school credit for home work first occurred to me nine years ago when I was a school principal. I had noticed that one of my rosiest-cheeked, most vigorous appearing girls spent much time on the streets after school. One day Mary's mother was pointed out to me. She was a pale, nervous little woman who was evidently overworked. Knowing that the family was large and not very well-to-do I felt myself burning with indignation at the circumstances that were drawing Mary away from interest in her home. I thought, "What is the use of my teaching that girl algebra and general history, when what she most needs to be taught is that her mother is her best friend and needs her help?"

At the algebra recitation the next day I announced that the lesson for the following day would consist of ten problems as usual, but that five would be in the book, and five out of the book. The five out of the book would consist, for the girls, of helping cook supper, helping with the kitchen work after supper, preparing breakfast, helping with the dishes and kitchen work after breakfast, and putting a bedroom in order. When I asked for "hands up" on all the problems the following day, I noticed that Mary kept hers raised after the others were down. "What is it?" I asked. "I worked five in advance," she replied with sparkling eyes, "I worked five ahead in the book, besides the ten that you gave us." From that time Mary's interest in all school work was doubled. She was right in the first rank. The rest of the year we regularly talked over the girls' home work. School public opinion encouraged the girls so that more and more reported on what they had done in housework and sewing, and fe t proud of it. Best of all, our discussions brought the school and the home together. The year was successful for all of us. More parents visited the school, and there was a concerted movement for the betterment of school conditions.

The school credit plan for home work is to have the school recognize home work as well as the home recognize school work. Many girls and boys cheerfully do work at school, but when the school hours are over, they feel that their duties are discharged, they look upon home work with contempt.

One mother said, "When you (the teacher) ask Fay to perform home duties she goes at them cheerfully and thinks them worth while, but when I (the mother) ask her, she either refuses or performs them grudgingly." The student, as well as the teacher, seems to have the traditional reverence for the text book. Many efforts have been made to depart from the text and make the work of the school and home go hand in hand, but facts are still learned *as facts*, and not for use. As was once said of the study of chemistry, one of three results were looked for and obtained, an explosion, change in color, or an ill smelling odor, and here the experiment stopped with no realization that almost every act and change in life was applied chemistry.

The real purpose of education in the public school system is to make good citizens and good home makers, yet many act as if the purpose is to make of all of them teachers or encyclopedias of facts.

A prominent educator said last summer, that he would rather have his girl, if necessary, spend two or three days in the home kitchen working out a problem, than come to school, stand at a laboratory table and not realize that the problem was a life problem, not to be applied in the class room but in life.

Outside work may be and often is highly educative and the extra time the pupils spend either during the school year or during vacation is well used if spent in doing wholesome, honorable, thought-inspiring work. Pupils may be encouraged to seek employment during spare time and often the citizens will aid and become interested in the schools. While the remuneration is important to many, the intellectual and moral value of work well done is of inestimable value to all.

Habit is a strong master and if the children are allowed to shirk responsibility of home and life work until school days are over, and are found wanting when expected to step at once into life's responsibilities, it is not their fault. Many a hard working mother has spared (as she thought) her daughter the drudgery of home work until she acquired a home for herself, with a result that the profession of homemaking became a burden or she utterly failed to make good in it.

The objection is often raised that there is no way of determining the quality and standing of the work. In a measure this is true, but better coöperation is had when the teacher trusts the parent as well as the parent the teacher and although in some instances it may be found to fail, on the average the results are good. Many teachers have reported that results were better both at home and school for this cooperation and many boys have been kept in school longer by showing them that their efforts outside were recognized; and they remain in school for an education that their outside work may demand greater recognition and compensation.

The twelve month school has been tried in Cook County; three months was largely home work but recognized as school work. We give the result as reported by Mrs. Agnes M. Page, principal of the Morton Grove School. (Quoted from a newspaper clipping.)

To prove the value of the plan I need only to introduce one of my boys who made two grades in one year in addition to his work in the fields.—Harvey Brooks, a 15 year-old pupil of the Morton Grove School then told the teachers how he had made $200 during the summer months by the cultivation of fifteen-sixteenths of an acre of land rented from his father, a florist. "And I received a letter from George Mittendorf, a South Water Street vegetable dealer, telling me my radishes were the finest specimens he had obtained this year," said young Brooks.

The principal of the first twelve-month school in the United States, described his methods for the teachers. His twenty-nine pupils already have "banked" $828 in net profits and are not through marketing their products.

Methods of giving this credit or recognition may differ widely, but in every case it should be properly reported and satisfactorily done. Last year over 6000 boys in the Philippines received school credit for raising corn. Venice High School, California, has worked out a successful plan as follows:[1]

Extra credits on pupils' standing may be earned by their doing additional work during the school term or during vacations, at school or elsewhere, on the following conditions: Pupils may receive credit on their school records for extra school work, for outside athletics, music, home work, gardening, office work, mechanical work, newspaper work, reading, travel, school activities not included in the regular courses, and other

[1] Copied from pamphlet issued by Venice High School, Venice, California.

educative efforts, when such extra work is done in a systematic and thorough manner, and in amounts that make it of positive value. Pupils desiring such credit must present to the principal two reports of the work for which the credit is asked—one report to be made out on a blank furnished by the school, and to be signed by the employer or the one superintending the pupil's work for which credit is desired; and the other to be prepared by the pupil and to consist of a brief written description of the work done. On the approval of the principal the teacher in charge of the subject to which the pupil desires to have the credit applied may permit the pupil to give an oral report, in the presence of the class or the entire school, in lieu of the written description. The amount of credit to be allowed in each case will be determined by the principal in consultation with the teacher concerned.

The aim of the plan here indicated is to encourage pupils in independent, systematic efforts to accomplish worthy objects. It is the hope and belief that such efforts will lead to an application of training, and that they will bring about a closer correlation between the school work and the home life and civic life of pupils.

Chillicothe High School in Missouri has worked out an elaborate plan for giving credit for outside work:—One unit out of sixteen required for graduation may be received for outside work. Two units out of seventeen required for "Graduation with Credit" may be received for outside work. Three out of the eighteen required for "Graduation with Honor" may be received for outside work. The term "outside work" as interpreted in a pamphlet issued by the Chillicothe High School may include music (either vocal or instrumental), literary work inside or outside of school (debating, public speaking, etc.), work in any of the local trades, home tasks, etc. All of these and many other things can be done for school credit. A definite statement of the amount of credit given in each different phase of work is published in the school pamphlet.

A feasible plan seems to be to raise the promotion grade from pass to fair, or fair to good, etc., for having done one hour a day systematic home work, or the holiday plan of giving a half or whole day holiday to the ones having recognition for outside work, this holiday under the direction of a teacher to be spent in visiting a model farm; an ideal home as to building or furnishing; a good store for selecting good furniture or colors; or any educational excursion the neighborhood affords.

The results in all cases where the teacher has given it a fair trial and taken the right interest have proven a help to both the school and the home.

With some of the younger children, to whom charts were given to be marked daily, the results were good. Two girls acquired the habit of daily washing the teeth, several of sleeping with the windows open, and three mothers report much more help from their girls. All of this is well worth while and will add to the health and efficiency of citizens. The school from now on should more and more recognize that whatever a child does that is worth doing and is well done has an educational value.

TEACHING HOME ECONOMICS IN RURAL COMMUNITIES

HANNAH P. WATERMAN

Extension Department, State Normal School, North Adams, Mass.

Our great leader in realizing the possibilities of country life in Massachusetts has been the Agricultural College with its resident courses, farmers' weeks, summer schools, rural conferences, extension service and its strong leadership in every phase of rural understanding and growth.

For the women in rural communities, perhaps, the work of the Home Economics department has brought most welcome variety and service. The canning demonstrations that have helped to successfully conserve the delicacies of summer for the winter's menu, the talks that have given new ideas for cooking and serving and have reimpressed the well-known yet half-forgotten reasons why some habits of cleanliness and of carefully selected diet were good, and above all the inspiration that came from realizing that we belonged to a sisterhood of women aspiring to make housekeeping a science and economy an art has helped homemaking to continue worth while. They have revived the feeling that domestic art is even worth the effort of growing daughters.

In this education of the daughters, the normal school at North Adams is vitally interested. We believe, with the college, that the country girl has every right to the good training in Home Economics given almost without question and by a specially trained instructor to her city cousin. An opportunity to know how to utilize farm products in cooking well-balanced, palatable, daintily served meals seems her

rightful heritage, and a warm lunch for the girl or boy whose morning of study is to be followed by an afternoon requiring an active brain appears a demand of justice.

We realize that specially trained instructors or supervisors of domestic science are not possible, as yet, in country towns; they might be undesirable. The regular teacher can learn to teach cooking and with it much of hygiene and sanitation. Then, too, the teacher who is with the children every day and all day knows their needs better than the occasional teacher of a special subject can possibly understand them. Our graduates go out prepared to coöperate with the community where instruction in household arts is desired. The enthusiasm of our instructors is contagious and in the rural training schools they have learned how to fit such instruction into the school program.

The college, however, often finds response from some section where the teachers have never prepared a meal and the wish for school instruction in cooking arouses a sense of helplessness. The appeal for assistance from such teachers is always welcome and among those who enroll for a course in cooking by correspondence are some of our most resourceful rural leaders.

To such students we recommend the equipment absolutely necessary for a rural school if it has not already been given. When we know the number of children, their approximate ages and something of their resources we furnish a suggestive outline for lessons to be given during the school months,—an outline subject to whatever change conditions justify.

The teacher is given definite directions for finding which recipe fits the immediate needs of her school, arranging for obtaining materials and for planning and conducting the lesson. She is given a cook-book of classified recipes which have been prepared by our instructor in domestic arts and served with success by children. Instructions for having the children make their own cook-books follow easily. The student's lessons are guided by notes so grouped as to include the forms of cooking taken by students in residence and to allow the student by correspondence to take them in the order most advantageous for her children.

The student holds sanitation clearly in mind throughout her course. Cleanliness of person, clothing, materials and utensils, the proper disposal of waste and the care of kitchen and dining-room furnishings are

fundamental to every lesson. A study of composition of foods, the value of variety in the menu, and proper diet for growing children as well as for manual laborers, brain workers or invalids lends interest to the preparation of each lesson and appeals to the problem of balancing menus, while the discovery of meat substitutes and of new ways of cooking common products becomes absorbing.

The children enjoy the work quite as much as their teacher, perhaps, and in their growth in responsibility and womanly qualities lies part of her recompense for having summoned the courage to enter a new field of leadership among them. The feeling of power which comes from having mastered a problem worth while is a reward in itself and the growing sense of companionship with her children and her children's parents renders her teaching a friendly service.

ASH CONTENT OF CANNED VEGETABLES, WITH SPECIAL REFERENCE TO CANNED PEAS[1]

AGNES FAY MORGAN

That the ordinary methods of cooking vegetables do not conserve the inorganic compounds present has been shown in several instances. This fact was first pointed out by Snyder[2] at the Minnesota Experiment Station, who worked with carrots, cabbage, and potatoes, as typical vegetable foods. The results of his experiments showed that the loss of salts in these vegetables is proportional to the surface exposed, and is increased by the use of cold water at the beginning of the cooking. The removal of the skins of potatoes increases immensely the salt loss.

The losses involved in discarding the water in which certain vegetables have been cooked have been determined experimentally by Miss K. I. Williams[3] who found, for example, that the loss in ash in the case of butter beans was 5.54 per cent and in the case of soy beans, 13.39 per cent. These determinations were carried somewhat further, in work published in 1912, by Miss Berry,[4] who compared the losses

[1] Presented in part fulfillment of the requirements for the degree of Ph.D., University of Chicago, 1913.

[2] U. S. Dept. Agr., O. E. S. Bul. 43.

[3] *Jour. Am. Chem. Soc.*, 26 (1904) no. 3, pp. 244–252; 29 (1907) no. 4, pp. 574–582; *Jour. Indus. Eng. Chem.*, 5 (1913) no. 8, pp. 653–656.

[4] JOUR. HOME ECON., 4 (1912) no. 5, pp. 405–412.

involved in steaming green vegetables with those involved in boiling them in water. The results of her experiments showed that steaming instead of boiling the green vegetables, e.g., spinach and cabbage, effected a very considerable saving in total salts, phosphorous, calcium, and magnesium.

Maurel and Carcassagne[5] reported a considerable amount of data on the loss of ash and particularly of potassium oxide in the cooking or "blanching" of vegetables. Vegetables cooked 20 minutes were found to sustain a loss of total ash as follows: Cabbage, 55 per cent; asparagus, 35 per cent; Brussels sprouts, 44 per cent; cauliflower, 40 per cent; green beans, 34 per cent; white beans, 19 per cent; celery stalks, 26 per cent; lentils, 33 per cent; celery leaves, 37 per cent.

Corn, barley, wheat, white beans, lentils, dry peas and potatoes were boiled in water for three hours. These cereals were found to lose 38 to 57 per cent of all their mineral content, and of this 43 to 55 per cent consisted of potassium oxide or carbonate, the vegetables lost 30 to 61 per cent of total salts, 54 to 89 per cent of which were potassium salts. Most of the extraction took place in the first hour of boiling. It may be observed that the blanching for 20 minutes caused very nearly as large a total loss of salts as the three hour boiling. The French practice of "blanching" vegetables, in which they are parboiled previous to the final cooking, appears thus to have a serious effect upon the basic or antiscorbutic properties of the vegetables. These investigators have reported other highly valuable data as to mineral loss, particularly potassium, in the blanching of a long list of other foods, as tomatoes, beets, carrots, spinach, etc.

In 1905, T. Zschokke[6] published the results of his work on comparative losses in steaming and boiling vegetables preparatory to canning them. Carrots, beans, and peas when steamed instead of boiled as in the usual method of blanching before canning, were found to become soft 3 to 5 minutes sooner than samples cooked in water. The water in which the vegetables were boiled was found to be cloudy, and green in color in the case of the beans and peas, and yellow in the case of the carrots. When the same vegetables were steamed the water was neither cloudy nor colored.

The writer has attempted to determine the amount of mineral loss in the canning of peas by the usual commercial process as compared

[5] *Compt. Rend. Soc. Biol.*, 67 (1910) no. 25, pp. 91–93; no. 26, pp. 211–213.

[6] Landw. Jahrb. Schweiz., 19 (1905) no. 9, pp. 619, 620.

with the loss in the home-canned product. The usual canning process is described in considerable detail by A. W. Bitting.[7] The points in this technical process which might well affect the mineral content of foods are the blanching, the strength of brine used, the temperature and length of time of processing. By processing is meant the heating of the filled and nearly closed can under high steam pressure.

The blanching is a universal procedure in the case of most vegetables, certainly in the case of peas. Duckwall[8] directs that peas be blanched by boiling water "to remove mucus or slime, and a bitter principle." Bitting says that "vegetables should be kept in boiling water from one to five minutes to cause softening, and at the same time to remove some of the mucus substances which form upon the surface. The effect produced by a short boiling in the open as compared with boiling in a closed can is surprising. In another bulletin[9] Bitting says,

> There are two objects in blanching peas: (1) To remove the mucus substance from the outside and a part of the green coloring matter, so as to have a clear liquor in the can; and (2) to drive water into the peas, so that all will be tender. In the young juicy pea, the water content is at its maximum, so that the cleaning of the surface is all that is necessary. To get the best results, peas which are very old and hard will need a blanch approximately five times as long as young peas of the corresponding grade.

The water used in blanching is in every case thrown away, the extracted material thus being wasted. According to Leach[10] 2.03 per cent of the protein of the pea is soluble in water and is probably removed during blanching.

The next factor which affects the mineral content of canned foods is the strength of the solution used in filling the cans after the vegetables are packed. According to Oxborne and Campbell[11] 10 per cent of pea protein is soluble in salt solutions and only 2.03 per cent in water. E. Poppe[12] in 1911, reported work on the extraction of protein phosphates, and carbohydrates from dried peas by soaking in distilled

[7] U. S. Dept. Agr., Bur. Chem. Bul. 151.

[8] Duckwall, E. W., Canning and Preserving, vol. 1, p. 348.

[9] U. S. Dept. Agr., *Farmers' Bul.* 125.

[10] Leach, A. E., Food Inspection and Analysis, N. Y., 1907, p. 233.

[11] *Jour. Am. Chem. Soc.*, 18 (1896) no. 7, pp. 583–609; 20 (1898) no. 5, pp. 348–375; no. 6, pp. 410–419.

[12] *Bul. Soc. Chim. Belg.*, 25 (1911) no. 3, pp. 136–145.

water, and in solutions of varying concentration of common salt and sugar at different temperatures. He found that the more concentrated solutions extracted the least solid material from the peas, and the distilled water the most. In general the extraction seemed rather upon the concentration than the temperature.

The following figures given by Duckwall, before quoted, are fairly representative of the trade custom in liquors for all canned vegetables. He advises a brine made of 6 pounds of salt in 40 gallons of water to which 8 pounds of sugar may be added. This is 1.5 per cent of salt and 2 per cent of sugar. In reckoning the ash of canned foods this added salt is not always allowed for, and so the inconsistent statement that canned vegetables have a higher mineral content than the corresponding fresh article is accounted for. In Bulletin XIII, part VIII of the Bureau of Chemistry, United States Department of Agriculture this correction is made in all analyses.

The last factor in canning which affects the ash of foods is the temperature and time of processing. The cans are closed, capped or soldered, and placed in closed retorts into which steam is turned until the desired temperature is reached. The cans are kept at this temperature for a certain time, after which they are suddenly cooled. Necessarily the temperature and length of processing affect the amount of extraction as well as the integrity of the vegetable. Under the best trade conditions, canned peas, string beans, asparagus, sweet potatoes, and lima beans are likely to have lost in the process of blanching a considerable amount of their mineral nutrients. Tomatoes, corn, pumpkin, and rhubarb are canned with the liquor used in cooking them. Beets and sweet potatoes are cooked in their skins. Of the commoner canned vegetables in use in America, peas, string beans, asparagus, and lima beans, are those which are open to the question of avoidable waste of inorganic material in canning.

The following experiments were undertaken to discover whether the major loss of ash, occurred in the blanching or in the processing. Two different varieties of fresh peas were analyzed for total water, ash and phosphorous. One sample of the first variety was then blanched in the usual manner, and processed in the commercial style with a 2 per cent salt and 2 per cent sugar solution to cover. Another portion of the same peas was canned in the manner recommended in the United States Department of Agriculture.[13] The same kind

[13] U. S. Dept. Agr. *Farmers' Bul.* 359.

of brine was used as in the first canning and the jars were heated in boiling water one hour on three successive days. Glass jars were used, thereby obviating the determination of tin, which sometimes complicates the ash determinations. After a few days these jars were opened and the peas and liquor analyzed separately for total solids, phosphorous, and ash. A sample of the second variety of fresh peas was blanched as before and canned by the home method. This was also examined for total solids, and ash. In each case the water used in blanching was evaporated and total solids and ash phosphorous determined.

A comparison of the results obtained showed that there is a serious loss of ash, particularly of phosphorous, perhaps the most important constituent of pea ash, in canning by either the commercial or the home process. This loss is particularly heavy when the vegetables are blanched and the water thrown away, (18 and 25 per cent), but there seems to be also a smaller amount of extraction of salts into the liquor when the peas are processed under high steam pressure in the usual commercial way, than when simply boiled in water for two or three hours in an open vessel, on three successive days.

Comparison of commercial peas

	TOTAL SOLIDS	TOTAL SOLIDS OF LIQUOR	TOTAL ASH OF PEAS	TOTAL ASH OF LIQUOR
	per cent	*per cent*	*per cent*	*per cent*
Can No. 1	26.50	8.16	1.17	0.817
Can No. 2	14.16	5.40	0.96	1.270

The specific gravity of the liquor in each case was found to be very slightly less than one, and the acidity of the liquor equivalent to 0.323 and 0.202 grams, respectively, of acetic acid. In the case of the peas canned by the observer the liquor was found to be neutral. The striking difference in per cent of total solids seems to indicate that the peas of can No. 1 were soaked peas or else very mature (See Dubois, Bureau of Chemistry, Circular 54).

All analyses mentioned in this paper were carried out according to the methods recommended by the Association of Official Agricultural Chemists.[14] The Volhard method was used for chlorin, and the volumetric molybdate method for phosphorous.

[14] U. S. Dept. Agr. *Bur. of Chem. Bul.* no. 107.

Summary. The ash content of peas, blanched and canned by the usual high pressure process was found to be 46.1 per cent less than that of the corresponding fresh peas.

The ash content of peas, blanched and canned by the standard home process was found to be 50 per cent less than that of the corresponding fresh peas.

The ash content of peas, unblanched, and canned by the standard home process was found to be 22.6 per cent less than that of the corresponding fresh peas. All these percentages were calculated for the water-free substance.

The per cent of extraction of P_2O_5 in each case is rather higher than the total salt extraction, indicating a special solubility of the phosphorus compounds.

Inspection of two varieties of commercial canned peas shows a high total of salts in the liquor.

Much more work must be done on the distribution of mineral loss in canning vegetables by the various processes before any definite conclusion can be reached as to the economy of such processes.

THE IMPORTANCE OF A FOOD MUSEUM

E. H. S. BAILEY

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In teaching so important a subject as the composition of foods, one of the things most essential to a broad understanding of the work is a well supplied Food Museum. The attempt to teach without it is similar to the old time method of teaching chemistry or geology entirely from a text book without access to the laboratory or the museum. It is too much to assume that the ordinary pupil will have, from common observation, a knowledge of the sources of food products or the methods of manufacture. Pupils may have had opportunities to observe many things in this line, but in our class work the faculty of observation is woefully neglected.

A food museum should be built up for at least three purposes: First, in order to show such foods, for instance, as cereals, legumes, roots, fruits and herbs in their native or original condition, and to show the difference between that which is of good quality and that which is inferior. It is not difficult to obtain samples of all the cereals, of

pili and cashew nuts and of the locust bean, tamarind and soy bean among the legumes; yet how few people are familiar with them. Second, the common adulterations of foods may be illustrated by reference to the samples in this museum. There is a wide field for showing genuine and adulterated spices and the materials formerly so commonly used in adulteration, fraudulent samples of vinegar as compared with the genuine, and the preservatives and coloring matters which have been used presumably to improve the quality of a food. Third, and perhaps most important of all, the use of these museum samples gives an opportunity to demonstrate the various stages in the manufacture of foods, the variety of their by-products, and finally, the different grades of the food stuff as it appears upon the market. It is not difficult to obtain a complete set of samples illustrating the manufacture of sugar from the sugar cane or from the sugar beet. The preparation of rice from the field to the kitchen furnishes an interesting set of specimens.

The expression "built up" has been used advisedly, for a good museum grows by constant accretions. One set may be added from a reliable seed house, another from the flour mill and a third from the confectioners. It is only necessary to be constantly watching for suitable material, and the museum will soon become of great value for illustration.

Manufacturers of special food products are usually perfectly willing to furnish a set of the products which they put on the market, if they understand that these samples will be on display and will be used for illustrative purposes before a large number of students.

The permanent character of an exhibit of this kind should also be noted. The liquid samples can be put up in uniform bottles, containing from 8 to 12 ounces, and the solids show to best advantage in the well known inverted show bottles of about 8 ounces capacity. Cereals, seeds, etc. should be stored for a while to see that they are free from insects, before they are permanently installed in the bottles. The cork may then be covered with sealing wax, to exclude the air as far as possible. Samples put up in this way will keep without any deterioration for many years. If the labels become indistinct, they are readily renewed.

EDITORIALS

The Art Side of Home Economics. Mrs. Richards once said, "We are making the home better and more efficient on the practical side. But we must not forget the *play* side. Women should have not only satisfaction in reaching a given end but a joy in the doing of it."

There are those who feel this joy in the plainest surroundings and working with the simplest tools like the man who said: "All my life I have found a great deal of poetry in just plain prose."

Miss Warner in her article printed in the January JOURNAL says: "Art marks the eternal distinction between drudgery and work." And she quotes William Morris as saying: "The art in a thing is the living expression of the joy of a man in his work." "Art is the doing whatever has to be done in the best way in which it can be done." In all this there is much comfort for those who feel that they have had little opportunity to express themselves in any form of beauty. But though we may believe that "art was born of utility" we know past all denial that most people need help in working out their artistic expression in daily life. Every conservatory of music now gives extension courses in musical appreciation where the growth and development of music is shown and its simplest forms illustrated on the piano. Where are there open to every housekeeper art appreciation courses which shall prove to the doubting the true values of color in wall paper and decorations, and teach us to demand of the manufacturer furniture and dishes of beautiful design? And what artist among us will lay aside for awhile the painting of landscapes and portraits and teach women how to dress and how to circumvent the ignorant photographer who, secure in his maxim that "the camera cannot lie," knows not the elements of the art of posing a sitter so that that valuable and well meaning instrument is enabled to tell the truth? Until the trained artist leaves the confines of the studio and picture gallery and is seen in our streets and enters our doorways with helpful word, we shall live unbeautiful and therefore unsatisfied lives.

Institution Economics Section. As we go to press, we hear that the Executive Committee of the Institution Economics Section is holding a meeting at Lake Placid, New York, by invitation of Mrs. Melvil Dewey. This section will hold its annual meeting at the Lake Placid Club from June 26 to June 30, 1915. Ample provision will be made for the discussion of the essential problems of institution economics, both in the general program and by smaller groups interested in specific questions.

The meeting will be open to all who are interested in the institutional phases of Home Economics. The fee for attending or associate membership is two dollars for those who are not already members of the American Home Economics Association; for such members the fee is one dollar.

The program will be announced in the next issue of the JOURNAL. That issue will consist largely of the addresses given at the last annual meeting of the Institution Economics Section.

Material for Teachers. In response to our suggestions in the December JOURNAL we learn that Teachers College publishes a list of teaching materials and laboratory supplies for household arts which will be found useful for teachers. This may be obtained for 10 cents from the Bureau of Publications, Teachers College, New York City.

HOUSEKEEPERS' DEPARTMENT

WILL THE PARCEL POST REDUCE THE COST OF LIVING?

Mr. John C. Koons of the United States Post Office Department has said recently that what we should be talking about is not the high cost of living but the high cost of selling. According to government statistics "the value of the products of this country amount to $8,000,000,000 a year; $2,000,000,000 remain on the farms. When the $6,000,000,000 of produce sold reaches the consumer, he pays $13,000,000,000. That is, it costs $7 to market every $6 worth of produce."

It would seem that in the journey "from farm to family" our food products have paid too heavy a toll to the many hands through which they have passed, and the most rational way of adding to our $6 worth of produce is to save something from the $7 distribution bill. To help toward this result was one of the ends in view in establishing the parcel post. The Post Office Department has seemed to make the greatest efforts to bring producer and consumer together. Special stamps are no longer required, the maximum weight allowed for packages has been increased to fifty pounds and in thirty-two of the larger cities the post office furnishes a list of the addresses of farmers and the products they have for sale.

Still, it must be owned that results are disappointing, and it would seem from the very lack of the despised middle man; some one seems to be needed to attend to correspondence and to adjust mistakes, in short, to keep a standardized product moving without too much friction between producer and consumer. For instance, a city housekeeper wrote to fifty farmers whose names were found on the post office list, but received answers from only one in seven. Those who did not reply had doubtless sold out since the list was printed, but a good business house that could no longer furnish what it had advertised would have replied to that effect and thus kept the good will of a possible customer. Postage, time used in correspondence, and final disappointment in the character of what she received sent this woman back to the old way of buying.

Again, there is much difference of opinion as to how the margin between wholesale and retail prices is to be distributed. The farmer wants it to pay him for the bother of wrapping and sending a small package instead of selling his produce wholesale; the housewife wants it to compensate her for taking more time in correspondence and buying what she cannot examine beforehand. The buyer should make a definite and just proposal. One man reports buying every week five dozen eggs from a farmer living in the second zone from his own home. After the cost of postage and of the containers is added to what his local dealer offers to the farmer, there is a margin of six cents a dozen below the city retail price, which is divided between them, and both are satisfied.

Let no housekeeper who is trying to use the parcel post in buying food be discouraged because of a few failures. We can not expect that what is nothing less than a revolution in methods can be smooth running and successful after a year or two of trial. The post office promises still further helps, such as frequently corrected lists of farmers and their products and prices, these lists to be delivered by letter carriers to every housekeeper in town and city. Again, farmers will certainly coöperate as do farmers in Europe, for marketing their produce; the buyer will in time be ordering from a central office which handles the produce of its fifty farmer members, and this will greatly help the supply to meet the demand in a regular way.

FOR CLUB STUDY

At the request of Miss Helen Louise Johnson, Chairman of the Home Economics Committee, General Federation of Women's Clubs, the Journal has selected the above article for study in women's clubs.

Suggestions. City housewives who have made connection with the farmer (according to our advice in the January number), or better still, with a group of neighboring farmers, should buy a stout hamper for general produce or a number of egg containers, and make a patient attempt to get into cordial and helpful relations with the producer. If difficulties arise, ask advice of your post master or write to the Parcel Post Department in Washington. Coöperation with your neighbors in order to divide a larger order is strongly advised.

If the town in which you live is too small to be furnished through the Post Office Department with frequently revised lists of farmer producers, advertise in a paper known to have a good circulation in the country;

many newspapers have recently started a parcel post advertising column. The buyer must remember that the cost of marketing a small order is greater in proportion than that of marketing by the barrel or carload. After all expenses have been deducted the difference between wholesale and retail prices should be equitably divided. Personal acquaintance between buyer and seller is very desirable, and often leads to a regular arrangement for a week-end hamper to be filled somewhat at the discretion of the farmer. Let the Journal know the results of your effort.

"MADE AT HOME"

ANNA BARROWS

Teachers College, New York City

Readers of the JOURNAL are asking for help in deciding a question that is always pressing—Shall the baking, the washing, the sewing and other work be done in or out of the house? We are no longer saying that conditions vary so greatly that each housekeeper must decide this question for herself. There are certain principles that can be worked out for all.

Not many years ago every household was in much the position of Robinson Crusoe and depended upon its own resources for shelter, clothing and food. Now the pendulum has swung so far in the reverse direction that few persons know the whole of a single trade. The average individual today would go hungry and naked if suddenly forced to feed and clothe himself.

In these highly specialized days we are questioning whether it is wise to manufacture anything at home. This will be found to depend upon two factors: 1. The quality of the product made at home as compared with the commercial product. 2. The value to be put upon the time of the person who does the work at home.

First, as to the quality of the product. The word "homemade" is likely to be spoken in two widely differing tones of voice, each showing the attitude of the speaker toward the article under discussion. Sometimes our appreciation or depreciation is based wholly upon our own skill or lack of it. We admire fine needlework, drawn work, handmade lace, although they have their origin in the lowliest homes; we realize that their maker possessed skill which we do not. On the other hand we may despise homemade garments of our own manufacture, or refuse to attempt them because we realize

our own lack of skill to reach a certain acknowledged standard. The very core of the question is, Who makes these standards?

We undoubtedly have one standard for what is intended for home consumption and another for what must meet the commercial demand, —the latter must be salable. Whatever is made at home is likely to possess an individuality seldom found in articles manufactured in quantities. Homemade generally implies hand rather than machine work and in most cases more head is necessary to direct the hand than the machine. Some people highly prize this method of family or self-expression. Here is the field of sentiment rather than of economic values.

If we look over the common necessities of life we shall find that in some cases we scorn the homemade and in others have an almost superstitious reverence for it. There is a traditional reverence for homemade bread not wholly justified by the quality of bread found in the average home. It is eaten at home where criticism is modified by tradition. We employ the caterer for social functions and cheerfully eat stereotyped dishes like oyster patties, chicken croquettes, lobster salad, and cakes and ices, over and over at every reception rather than venture outside the conventional routine and serve homemade refreshments. This is generally because we think the homemade products cannot meet the public standards, whatever they may be.

In household furnishings there is now an effort on the part of most intelligent persons to make their homes express themselves rather than to accept them ready made from the hands of architect, builder and decorator. This is a welcome sign, but to make the effort successful requires innate good taste and much artistic training on the part of the homemaker.

We come now to the question of comparative cost—a question to be settled not by sentiment but by cold figures. Manufacturers tell us that of the two factors, material and labor, which determine the cost of an article, labor is far more important. In the home, indeed, material may be a by-product of no value unless used in home manufacture—a familiar instance is refuse fat from which the housekeeper of a former time made her soap. It is in her valuation of her time that the greatest mistakes are made in calculating the difference in cost between the homemade and the commercially made.

Who will send to the JOURNAL records and comparisons along these lines?

HOME ECONOMICS FOR FARM WOMEN OF THE SOUTH[1]

The county women agents who during the summer have been teaching southern girls to can their garden products and tend poultry will continue during the winter to make other practical demonstrations in Home Economics for such farm women as desire them, if the plans materialize which the U. S. Department of Agriculture hopes to carry out in coöperation with the state colleges. These women will have the club members grow winter gardens. It is also proposed to have capable county agents make demonstrations in such lines as the following: utilizing canned goods in cooking, bread making, use of fireless cookers, preparation of vegetables from winter gardens, home-made step and labor-saving devices, and similar subjects. Thus the Girls' Clubs work will be carried into the home, and mothers as well as the girls in southern rural communities may become acquainted with the most up-to-date methods of housework.

CARE OF PALMS AND FERNS IN WINTER[1]

Palms. Palms are much used for interior decorations where there is no direct sunlight. Regular watering is essential, with especial care not to overwater. It is better with most palms to keep them a little dry than too wet. Where a pot is in a jardiniere especial care must be exercised not to have them too wet.

While small, wash the foliage occasionally with soap suds made from a good soap. Immediately follow with a thorough rinsing. When too large for this, spray the tops frequently with clear water.

Browning at the tips usually comes from trouble at the roots: first, overwatering; second, worms on the roots; third, lack of plant food. The first is the trouble in nearly every case. The worm that gave the trouble is not the ordinary earth worm, but a little white harmless looking creature that emerges into the air as a small fly. Dissolve a piece of quick lime as big as a tea cup in three gallons of water. After it is through sputtering and the milky mixture has cleared, pour off the clear part and soak your soil with it. Do not dilute, for the soaking should be thorough. To provide plant food, stir small quantities of bone meal and wood ashes into the surface or in place of ordinary watering occasionally use manure water or ammonia

[1] Office of Information, U. S. Dept. of Agriculture.

water (a teaspoonful of ammonia to a quart of water). Trim off the brown tips, as they will never recover. If the leaves turn yellow, look for scale on the under side and be sure you are not overwatering. Wash the scale off or spray with kerosene emulsion or whale-oil soap, or some nicotine preparation.

Ferns. Ferns as they come from the florists prepared for indoor culture should be placed in a strong light, though they grow well without sunlight. They should be watered sparingly but should be kept moist at all times. Improper watering, especially keeping the plant soaked or permitting it to get dry, is the foundation of most fern difficulties. It is especially difficult not to overwater when the fern is in a jardiniere, where drainage is necessarily poor. In spring and summer they will require three times the water necessary in fall and winter.

It is well occasionally to put them in the bath tub and give them a bath with weak soap suds made from a good grade of soap. The soap must be thoroughly rinsed off immediately. Great care must be exercised not to injure the fronds as they are very tender. Mealy bug is one of the worst enemies in house culture. This is a white woolly insect that works close to the bottom of the fronds. If found, the plant should be examined every day and all insects removed by a splint or tooth pick. If the pest is very bad, cut off all the top of the fern within an inch of the ground, treat thoroughly each day till all insects are exterminated when a new top can be grown.

Red spider is a minute sucking insect that thrives in a dry atmosphere. It can be kept in check by spraying the top with clear water. In living rooms this is frequently impracticable. The next best thing is repeated baths. The aphis or green fly is also eradicated by washing.

Ferns should be fed once in two to four weeks in the place of ordinary watering with dilute nitrate of soda (a heaping teaspoonful to a quart of water), ammonia water (a teaspoonful of ammonia to a quart) or manure leachings. Prepared plant food or a little sprinkling of ground bone and wood ashes also gives satisfaction.

UTILIZING THE WORKMAN'S DULL SEASON

"Is it a hurry order?" asked an upholsterer regarding the sofa that was to be done over. "Then it will cost you $40.00 but if you can wait and let me take it to my shop while you are away in

the summer I can afford to do it for $25.00. This is our busiest time and I have to pay an extra price to good men."

The woman who thus saved $15.00 on one article of furniture has inside painting done at a lower rate in the winter when it is too cold for the men to do outside work; she has also found that at the turn of the seasons when the old stock of wall papers must be gotton rid of to make way for the new, it can be bought at the most surprising reductions from the price charged only a few months before, and that the paperer is glad of work in the slack season. A better job may be expected in the repair of stoves and furnaces in the spring than just as cold weather is setting in. Many other ways of taking advantage of seasonal occupations will occur to the thoughtful housewife.

HOW TO DISINFECT ROOMS, FURNITURE AND CLOTHING[1]

For the benefit of those who have to disinfect after contagious diseases, details of the method being recommended by Boards of Health are here given. The help of an expert is not needed.

The windows, doors (with the exception of the one which is to give exit to the operator), registers, openings into chimneys, keyholes, and all other apertures through which air can pass should be sealed. In other words, the rooms should be made as nearly air-tight as possible. Gummed paper, put up in rolls, is made for this particular purpose. In lieu of it, however, common newspaper, cut into narrow strips and throughly wet, may be used, as it will remain in position long enough for the purpose. The paper used for sealing cracks, whether gummed or not, should be wet with a two per cent solution of formaldehyde, in order to disinfect the surfaces upon which it is to be pasted.

All surfaces should be exposed as much as possible; closet doors opened and their contents, together with the contents of drawers, removed, scattered about, and the drawers left open; mattresses set on end, pillows, bedding, clothing, etc., suspended from lines stretched across the room or spread out on chairs or other objects so as to expose all sides; books opened and the leaves spread—in short, the room and its contents so disposed as to secure free access of the gas to all parts

[1] Food Department, *North Dakota Agr. Expt. Sta. Special Bul.* 3 (1914), no. 12, pp. 209, 210.

as fully as possible. Upon this preparation largely depends the thoroughness of the disinfection.

The amount of cubic space to be disinfected should be calculated. For each 1,000 cubic feet of space, use six and one-half ounces of permanganate of potash and one pint of formaldehyde.

One large, flaring pail is the only apparatus needed. The pail should not hold less than ten or twelve quarts, and under it should be placed a few newspapers or a piece of old carpet, so that in case it should overflow or spatter during the intensely rapid effervescence which takes place, the floor may be protected. A wooden or indurated fiber pail is better for the purpose than one made of metal, as it better retains the heat which is evolved and which is essential to the best results.

When all is in readiness, place the permanganate of potash in the pail, then pour the formaldehyde upon it. The operator will be obliged to leave the room instantly on account of the rapid formation of gas. The premises should remain closed for not less than five hours; a longer time would be better. The temperature of the rooms to be disinfected should not be less than 60°F.

Remember that the formaldehyde solution must be poured upon the permanganate of potash, and never the reverse.

WHAT BED SPRINGS ARE THE BEST?[1]

HARRIETTE T. RICHARDSON

The modern spring was made possible through the development of steel. Cords and wooden slats provided a support for the mattress of the olden time but with the malleable steel wire the spring came into existence. In the simplest form it is seen wrought out of center disks into which four even steel wires are linked making a square four inches in size. This steel net is suspended by helixes—that is coils of steel at the head and foot of the frame. This taut suspension prevents sagging under the weight of the body.

The woven wire spring is attached to the steel frame directly without the use of helixes. It is in reality a steel hammock, and it provides for an even distribution of weight; nevertheless, it will sag.

[1] Part of a study of mattresses and bed springs, made at Teachers College.

If side support is required a steel rod is at times used. But this rod once bent never returns to place. In certain woven mattresses the edge is rolled from the steel spring itself and by this means a side support is secured. The cost of the steel woven springs varies from $3.75 to $10.

The box spring is made upon another design. This spring is built upon a wooden frame which rests fast upon a wooden bed and is rabbited under for the same position on the iron bed. Upon this frame are fastened coils of tempered steel knotted at the ends and shaped in the form of an hour glass. These are covered with burlap and fastened. Over the burlap are placed layers of cotton felt, hair or lamb's wool and a tick which is tufted exactly in the same fashion as the mattress; a tick covers the frame, at the sides and on the under part as well. These box springs are further protected around the edges beneath the tick by a bamboo rim or in certain makes by a tempered steel rod. If the steel is once bent the fault may not be remedied easily while the bamboo will spring back to place and is never permanently bent. The height of spring is determined by the purchaser.

The cost of the box spring varies with the top filling. It may be bought with no hair, or untufted, for $10, but when upholstered the cost is $27 to $28, and it will be noted that the sizes differ one dollar only in price. The cost lies in the workmanship.

The box spring is a better investment than the woven wire.

FOOD FOR SCHOOL BOYS AND GIRLS[1]

A Day's Food Plan. Age 14–18 Years[2]

BREAKFAST—500–800 calories	*Calories*
Fruit	50–100
Cereal	100–150
Milk	100–200
Bread and butter	150–300

[1] Extracts from Food for School Boys and Girls. By Mary Swartz Rose. New York: Teachers College, *Technical Education Bul.* 23, pp. 15.

[2] For amounts required, see January JOURNAL, pp. 38–40.

For children under 14 years, see April (1914) JOURNAL, pp. 179–181 and June (1914) JOURNAL, pp. 286–288.

LUNCHEON—600–1200 calories	
Macaroni and cheese, *or* hot roast beef sandwich, *or* bean soup and crackers	200–300
Cocoa *or* milk	100–150
Bread and butter	200–500
Baked custard, *or* rice pudding, *or* baked apple	150–200
DINNER—800–1400 calories	
Meat, *or* bean or lentil loaf and potatoes, *or* scalloped eggs	200–300
Green vegetables, cooked	25–100
Fresh fruit *or* vegetable salad	100–150
Bread and butter	200–600
Ice cream, *or* tapioca cream, *or* charlotte russe	150–200
Milk *or* cereal café au lait	100–200
Total	1800–3200

Most aversions to food are formed during or before the period of adolescence. These are deplorable socially and economically, and may be the cause of a badly selected diet. They arise through unpleasant associations, as sickness or accidents; through imitation of others, especially admired adults; through unpleasant suggestions made by others; or through idiosyncracies of taste. An enthusiasm for nourishing food needs to be cultivated among children by precept and example, and worthy foods should be kept from falling into disrepute by every legitimate means. The cultivation of a rational appetite will help immensely in laying the foundations of health for later years. Many of the results of dietetic indiscretions are not apparent immediately, and their seriousness is apt to be underestimated. Fuller physical development, greater resistance to disease, freedom from fatigue, increased mental alertness are hard to measure in concrete terms. But psychologists and physiologists are perfecting tests, and these, even in their present crude state, give abundant evidence of the value of food in promoting health. And while we are right in insisting upon economy in the use of food materials, it must be a rational economy which avoids waste but recognizes the necessity of an ample food supply, rich in building material, not only through elementary school and high school, but even through college. Many a young man and woman has, by subsistence on meagre and unsuitable food during the college years, paid the penalty of lowered resistance at a later period. If rigid economy must be practiced, let it be on the seasoned adult who can best bear it, and not upon developing young people, whose right it is not only to be well born but also well reared.

HOUSEKEEPING A GAME

Let the young men and women who make new homes look upon housekeeping as a game requiring consummate skill and affording much enjoyment to those who play it for themselves.

"Housekeeping a game?" Well, why not? What are some of the elements that make games enjoyable? The charm of uncertainty, of the unforeseen turn which brings victory, and the opportunity to show personal skill or prowess. Are not these present in the everyday routine of the new housekeeping? Probably it is the secretly recognized lack of skill or power to win the game that makes household processes so distasteful to many women. Strange that any woman will undertake the management of a home without some preparation in the arts involved.

WORK FOR ODD HOURS

Nothing is more called for, nothing more urgently needed than a list of money-earning occupations for odd hours in the home.

In default of this list the housekeeper can without doubt earn, or she may call it save, best by doing her own sewing, washing and baking, that is, if she must be at home caring for young children and preparing the meals—or she may choose of the three that for which she has most inclination or talent. On the other hand, the housekeeper who follows a regular vocation outside the home will buy ready made garments and patronize the laundry and the bakery.

But in any case when the garments require re-modeling, or the choicer laces and muslins will not bear the hard treatment of the laundry, then the home manufacturer may save more than she could earn in the same hours elsewhere. For the making over of garments it is desirable that one should know their defects and the conditions under which they are to be used in the future. Therefore, the home dressmaker with even a limited knowledge of the art often secures better results than the skilled seamstress. Material of good quality, made over at home will do better service, usually, than an inferior grade of ready made clothing. In combining two half-worn garments into one new one there may be found a fascination, not exceeded by a jig saw puzzle, or a game of cards.

A NEW USE FOR GRAPEFRUIT

A correspondent in the South suggests that in localities where grapefruit is cheap the juice might be used as a substitute for sour milk in making waffles, griddle cakes, muffins, biscuits, cakes, etc. The acid equivalent of a cup of sour milk would be furnished by two-thirds of a cup of juice. The remaining one-third of a cup of liquid is made up by adding water.

Some who have tried this substitute think the advantage lies chiefly in the added flavor, while others suggest that an objectionable acid flavor is noticeable.

IMPORTANCE OF RETAINING MINERAL MATTER IN CANNING VEGETABLES

The Journal has frequently called attention to the dietetic value now attached to minute quantities of mineral matter found in fresh vegetables and fruits, and also to the fact that these are to some extent soluble in hot water and thus liable to loss if the water in which they are cooked is thrown away.

As might be expected, it has been found that the mineral matter in certain canned vegetables is much less than that in corresponding fresh ones. For further details see page 72.

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Principles of Cooking. By EMMA CONLEY. New York: American Book Company, 1914, p. 206. $0.52. By mail of the Journal, $0.60.

As a basic text-book for teachers and pupils in upper elementary and secondary schools "Principles of Cooking" finds a deserved place among many recent publications in the household arts field.

Prominent among the distinguishing features of the book are (1) the broad view-point established through the suggestive references to the economic and industrial phases of the subject of foods, (2) the logically systematized sequence of principles of cooking, with a thorough comparative summary, (3) the application of principles in well selected basic recipes, with suggestions for adaptation and variation, (4) the detailed discussion of food stuffs, (5) the balance between the practical phases and the essential scientific principles involved, (6) the chapter devoted to the teaching of cooking in rural schools, (7) the selection of essential details in the teaching of simple table service.

Miss Conley has enriched the pages of her book with many valuable illustrations, and a well-organized index renders it very usable as a reference as well as a text-book.

Studies in Carbohydrates; the Composition and Digestibility of Wheat Bread and Allied Foods [and] Gelatinization of Starches. By C. H. LAWALL AND SARA S. GRAVES. (Trans. Wagner Free Inst. Sci. Phila., 7, 1913, pt. 2, pp. 35–45.)

The results are reported of the microscopic examination of 12 starches, raw and also cooked below and at the temperature of boiling water, including starches from cereals, potato, sweet potato, maranta, and bean and pea. In the cooked starches, "it was noticed that the absorption of water begins at the hilum, working toward the edge until the granules burst or collapse."

Similar studies were made of the starch of white bread, commercial rye, graham, and gluten bread, rolls and crackers, pretzels, and matzoth, and of the starch in cooked vegetables, including beans, peas, and lentils, boiled until soft, baked beans, string beans, and canned French peas (petits pois). With the vegetables, "in every case the starch granules were found to be entirely gelatinized, either swollen or broken."

Determinations of the gelatinization points of free starches from cereals, potato, sweet potato, maranta, bean, pea, and lentil were also made. "Noting the gelatinization points of raw and dried potato starch, and the diverse results in the pea and bean experiments, it is evident that the form of the starch and size of the particles have marked influence. It is possible that the time required to heat to the desired point may affect the result. The greatest difficulty, however, lies in determining the point at which the majority of the granules may be called gelatinized. It is not definite within 1 to 3°.

"The microscopic examination of starch, both raw and after cooking, has shown that in process of bread making it undergoes a marked change which has a direct effect on the composition and value of the bread produced. From 5 to 8 per cent of the insoluble starch is changed to a soluble form, and very many grains are ruptured and rendered more susceptible to the action of solvents, such as the digestive fluids, by combined action of heat and ferments. The 35 to 40 per cent of water prevents the temperature in the interior of the loaf from rising much above 100°, thus accounting for the small amount of soluble starch in comparison with the 10 to 18 per cent in bread crust and 5 to 12 per cent in crackers."

Food Analyses and Other Pure Food and Drug Topics. [Examination of Textiles.] By E. F. LADD AND ALMA K. JOHNSON. (North Dakota Sta. Spec. Bul., 2, 1913, No. 21, pp. 357–368.)

Some data are given regarding the relative cost of a meal in hotels and restaurants of different grade and the relation of fancy marketing of food products to the cost of living. Some pure food and drug topics are discussed and data are given regarding the examination of miscellaneous foods and beverages.

A sample of cloth said to have been purchased as "all wool" flannel was examined and found to contain approximately ⅔ cotton and ⅓ wool. "This is characteristic of a good share of the material sold as 'all wool' or 'commercial wool.'" It is stated that samples of so-called "woolen cloak goods," which one of the authors saw made in the factory where the samples were procured, consisted of cotton, 10 per cent, Australian wool, 10 per cent, and shoddy, 80 per cent.

"That this material might be called 'commercial wool' is true, but the statement that it contains enough of cotton, about 10 per cent, to make it wear better, when, as a matter of fact, the truth is that it contains 10 per cent of cotton to hold the shoddy together, 80 per cent of ground-up rags, and 10 per cent of real wool. The ground-up rags may be all wool, but they are not what is understood as such when purchasing all wool goods,

nor are they of the same value. At the present time when one buys the product called 'commercial woolen goods,' he may be getting an article that contains a small amount of cotton and the rest straight wool, but he is more apt to be getting a considerable proportion of cotton, a small amount of true wool, and the balance shoddy or ground-up rags."

The need for a textile law is urged.

Pure Food and Sanitation. Papers at the Seventeenth Annual Convention of the Association of American Dairy, Food and Drug Officials. (Proc. Assoc. Amer. Dairy, Food and Drug Officials, xvii, 1913, pp. 165, figs. 2.)

In addition to officers' reports and similar material, papers on a variety of pure food and related topics are included. Among others are the following: Supervision of the wholesomeness of materials, by E. F. Ladd; to what extent should the functions of a State food department be regarded as educational, by L. P. Brown; the fat standard as a substitute for the water standard for butter, by W. C. Frear; net weights and measures laws, by A. H. Jones; what should be the attitude of food officials toward the supervision of sanitary conditions in hotels, restaurants, dining cars, and eleemosynary institutions, by G. L. Flanders; what attitude toward the supervision of sanitary conditions in restaurants, hotels, etc., by C. D. Woods; sanitary food law and the use of the score cards in sanitary inspection of food establishments, by H. E. Barnard; the score card system of food inspection, by G. B. Taylor; the analysis of a sample of sugar vinegar made from cane sugar, by W. H. Harrison; an apparatus for the rapid determination of available carbon dioxide in baking powder, by B. Harrison; and the water content of oysters, by F. L. Shannon.

Markets for the People. By J. W. SULLIVAN. New York: The Macmillan Company, 1913, pp. 316. $1.25. By mail of the Journal, $1.35.

A well-considered plea for the despised pushcart as a means of reducing the cost of living by lowering the price of food. As such it merits the serious consideration of students of Home Economics. These students need not the figures presented here to convince them that the item "food" is the largest in the average household budget, often constituting between 45 and 60 per cent of the total family expenditure. Well-stocked provision stores dealing in all kinds of foods are, according to the author, a convenience to the rich and to the well-to-do. Permanent municipal markets are liable to benefit chiefly the commission merchant and the middleman in general. Hope for the poor, however, lies in the provision section of the department store as a source of staple goods and in the ambulant push-

cart vender who, in the opinion of the author, should be provided with a place in the public park or other open space where at popular marketing times (Saturday evenings, for example) he can cease from ambulating and give his exclusive attention to his patrons. "Working-class London in general, and much of middle-class London as well, buy the bulk of their perishable necessaries from ambulant pushcart vendors or at open-air markets. The system is at once the most ancient and the most modern. It is the cheapest of all systems—efficient, natural, democratic, rightfully communistic. It often gives the masses double rations."

The book contains a chapter on coöperative buying and much other material which bears more or less directly on the problem of how "the successive barriers that clog the flow of foodstuffs from the country producer to the city consumer" can be broken down; its chief claim to distinction, among the host of books on the same subject, lies in the unique character of the remedy which it advocates and in the facts which it assembles in support of its plea.

How We Serve Hawaiian Canned Pineapple. (Honolulu, 1914, 2 ed., pp. 24, figs. 29.)

This pamphlet, issued by the Hawaiian Pineapple Packers' Association, contains numerous recipes for serving canned pineapple in a great variety of ways. The recipes are contributed by fifteen well-known cooking experts.

Making Built-In Furniture. By ABBOT MCCLURE. New York: McBride, Nast and Company, 1914, pp. 52. $0.50. By mail of the Journal, $0.55.

The latest of the House and Garden Making Books is the one on Making Built-in Furniture. It includes a number of sensible suggestions for artistic, convenient and permanent additions to the house in the way of furniture for storage purposes, such as bookcases, drawers, closets, cupboards, side boards, dressers, etc., and of furniture for personal or bodily accommodation, such as settles, benches and desks.

Usefulness, appropriateness and beauty are insisted upon. No attempt is made to give directions for making such furniture, but the drawings and photographs as well as the text are suggestive and illuminating.

NEWS FROM THE FIELD

New England Home Economics Association. On Thursday afternoon, December 3, the New England Home Economics Association held its opening meeting in an informal "At Home" in its new headquarters, 4 Joy Street, Boston. Mrs. Eva W. White, the president, told of the plans for weekly round table conferences, beginning January 4. The first Monday of each month is to be for the Social Workers and Nurses, the second Monday for the Domestic Science Teachers, the third Monday for the Homemakers, and on the fourth Monday we plan to have an open meeting with speakers on coöperative buying.

It is hoped that friends from all over New England will bring their problems to the round table for discussion. These discussions will be led by persons prominently connected with the special lines of work. At these meetings notice will be given of other meetings or lectures on Home Economics in or around Boston.

The Home Economics Association of Philadelphia. The classes planned by the Home Economics Association are successfully under way. Great interest is being shown in the class in dietetics, with laboratory work, which is being given at Drexel Institute by Miss Hannah Hill.

Between fifty and sixty people have joined the class on "The Budget," conducted by Miss Emma Winslow of Teacher's College. The following is the outline of the course as Miss Winslow expects to give it:

I The history of the budget: The budget as it has been used by governments, by business and social organizations, etc.; the increasing realization of its importance as an instrument of financial control.

II The budget of the household: The budget plan as used in the household; the budget standards as set by various investigators of household expenditures.

III Household accounts and the budget: Methods of keeping household accounts; methods of using budget standards in controlling expenditures.

IV The expenditure for housing: The importance of good housing as a basis for normal, healthy family life; the economic and social factors which influence the amount to be legitimately spent for housing.

V The expenditure for clothing: The importance of the wise selection of clothing if the family are to be adequately clothed with a not too large expenditure of money; discussion of the various suggested lists of clothing where the minimum expenditure is a necessity; the additional items which are necessary.

VI Food expenditures: The minimum standards that have been set by various investigators; the range of variety possible in low cost dietaries; the need for education in the selection of the right kind of food, and in its purchase in such a way that minimum prices are paid.

VII The operating expenses: The housewife's time, or her money for labor-saving devices or a servant's wage; how low is it fair for the operating expenses to be kept?

VIII Savings and the "higher life;" After the necessities of living are provided, what?

IX Discussion of budgets collected by class.

X Discussion: Is a budget worth while?

Ohio Home Economics Association. The fifth annual meeting of the Ohio Chapter of the Home Economics Association was held in Cleveland, Ohio, on October 22, 23, 24, 1914, in conjunction with the North-Eastern Ohio Teacher's Association. The afternoon of the 22d, and the morning of the 23d were devoted to school-visiting.

The program of Friday afternoon was devoted to the art phase of our work. Miss Adelaide Van Duzer, supervisor of Household Arts in the Cleveland schools spoke on the Use of the Model Apartment in teaching Household Arts. Miss Agnes B. Slaymaker of the Interior Decoration Department of one of Cleveland's most exclusive shops, The Halle Brothers Company, spoke on Art in Textiles, illustrating her talk with simple and inexpensive as well as very costly fabrics. Miss Jean Garrabrant of West Technical High School, presented Art in Dress, giving illustrations through line sketches of good and bad taste in clothes. Mr. A. D. Kennedy of East Technical High School spoke on Art in House Furnishings, and he used fabrics, paper, furniture and wood finishes to illustrate color schemes for various rooms.

The Saturday morning meeting was held in the rooms of the Household Administration Department, Western Reserve University. Miss Mary E. Parker, head of that Department gave her impressions of the June meeting of the American Home Economics Association. Miss Florence M. La Ganke, Western Reserve University, talked on the Relation of the School-Lunch to the Pupils' Health, and told of work being done in other cities. She laid especial emphasis on Cleveland School-feeding which is

financed and managed largely by the Federated Woman's Clubs. Miss Cecelia A. Evan's topic was Homemaking as seen by a Visiting Nurse. She put in a plea for the teaching of Homemaking—especially Marketing and Costs and Table Service—to boys. The last speaker was Prof. C. C. Arbuthnot of Western Reserve University, who chose Marketing in Theory. The subject dealt with economic and social phases of the problem.

Miss Marcella Macke of Dayton is compiling a State directory of Home Economics teachers.

Home Economics Day. The California State Normal School of Manual Arts and Home Economics Branch of the American Home Economics Association kept Memorial Day for Mrs. Richards by having a very dignified but delightful program at the close of the day on December 3. The program consisted of music, and addresses on phases of Mrs. Richards' work, personal recollections of Mrs. Richards, and the Memorial Fund.

The lecture room was very tastefully decorated and Mrs. Richards' fondness for flowers and her idea that a row of flowers or potted plants could be used instead of a curtain in front of windows, especially of dining-room windows, was called to our attention by palm branches before the windows in the school. No celebration in honor of Mrs. Richards is complete without at least a small exhibit, for Mrs. Richards believed so deeply in the value of exhibits as a means of educating public opinion. And hence a small exhibit of personal letters, Mrs. Richards' books and the Memorial numbers of the JOURNAL were arranged and the walls were decorated with some of the best mottoes from Mrs. Richards' writings selected by the students in Home Economics.

Mrs. Richards' personal letter to Miss Stewart giving her reasons for the use of the word Euthenics was of special interest.

"My dear Miss Stewart:—No, indeed, 'Euthenics' is to be used only for a *college* course on the lines of sociology or social economy. I do not mean cooking or millinery but a broad study of conditions leading to a better practice. It is the ethics of scientific living. * * * * Dr. Robins at the meeting at which eugenics was discussed said that he believed that food was the greatest o al factors in the development of the child. I searched the Greek dictionary for a word which should mean improvement through environment rather than heredity—of those I selected and submitted to Dr Gildersleeve of Johns Hopkins he thought *Euthenia* came nearer and so I started the term Euthenics. * * * I do think Euthenics a very good word to signify race betterment through existing possibilities which are under our control and that the fact that they are under our control is the most important one to teach.

* * * (signed) ELLEN H. RICHARDS."

Mrs. Richards' interest in Santa Barbara and the growth of Miss Rich's work here was always very keen. President Rich gave tribute to the debt which we owe to Mrs. Richards for her wise advice, helpful counsel and personal interest in the early growth of the work in Home Economics in California begun by Miss Rich first in the Public Schools and later in the special normal school of Manual Arts and Home Economics which because of its high standards and thorough work was shown much appreciation by Mrs. Richards.

North Dakota Agricultural College. Recently the national chapter of Phi Upsilon Omicron Fraternity installed the Beta Chapter in this college. Graduates of Home Economics courses leading to the degree, or college women who are interested in some line of investigation or some educational work, are eligible to membership in this fraternity. Its aim is to advance Home Economics. The chapter is planning a program for Home Economics Day and hopes to contribute to the Memorial Fund.

Last year the fraternity house of the Minnesota chapter was turned over to the Home Economics Division for an experiment in carrying out a self-supporting home management course. The data thus obtained furnished a basis warranting the Division in securing a larger house for this year and establishing the course as a permanent requirement in the curriculum. Further details are given in the following news item.

University Farm, St. Paul, Minn. The Home Economics Department has rented a large house for a practical course in home management. It was at first an optional course but proved to be of such value during the semester it was tried that it is now required of all seniors for graduation. Twenty girls live in the house, eleven of whom are permanent boarders, and the other nine are seniors who are required to stay at the house for nine weeks, doing all the work for that time.

Miss Josephine T. Berry, head of the Home Economics Department, is primarily responsible for the organization but it is under the direct supervision of Miss Grace Williams.

The house manager has by far the most difficult work. She must plan the menu for the week and is responsible for everything that is done during her time of management. She is allowed thirty cents a day for each person for food, that is, raw material. The boarders are unanimous in declaring the fare excellent for a boarding house.

The regular boarders, who are made up of college girls and members of the Home Economics faculty, pay $25 a month, while the workers pay $20.

There are fifteen rooms, five on each floor. This gives ten bedrooms to accommodate twenty girls. Eight of the girls sleep on a large porch.

Extension Work in Massachusetts. A free course of lectures and demonstration on Home Economics is being offered to interested people in the State of Massachusetts. The purposes of this free course as outlined in the folders are: to present to as many women in the state as possible information on subjects pertaining to homemaking; to arouse interest throughout the state in a state-wide campaign of education on the subject of Home Economics; to secure the introduction of these subjects into the schools, especially those of small villages and rural districts, and the employment of trained teachers for the carrying on of the work.

The organizations coöperating in this campaign are: the Massachusetts State grange, the Home Economics section of the Massachusetts Federation of Women's Clubs, the New England Home Economics Association and the Extension Service of the Massachusetts Agricultural College. Six towns have signified their desire for these lectures and demonstrations to be given.

Home Economics Section of the Central Association of Science and Mathematics Teachers. This section met for the first time on Friday, November 27, at Hyde Park High School, Chicago. About two hundred teachers and students of Home Economics were present.

Short papers were read, as follows: Household Management Course in High School, Bernice Allen, High School Department, School of Education, University of Chicago; Teaching Food Work through Preparation of Meals, Agnes Wilson, Housekeeping Center, Stockyards District, Chicago; House Decoration Course in High School, Isabel Clark, Beach Manual Training School, Oshkosh, Wis.; High School Dietetics, Ada Hillier, South Bend High School, Ind. At the close of the discussion following these papers, the section voted to instruct the chairman to appoint a committee on nomenclature to take up the question of terminology to be used and corresponding content of subject matter, in naming high school courses, with a view toward securing greater uniformity in that respect. This committee was appointed as follows: Miss Van Hoesen of Chicago University, chairman; Miss Clark of Oshkosh, Miss Firth of Davenport, Ia., Miss Latta of Columbus, Ind., and Miss Green of De Kalb, Ill.

Mrs. Sabin of Lucy Flower Technical High School, Chicago, answered many questions which followed her paper describing the work of the lunchroom class of which she is the teacher. Miss Grace Hood, director domestic science and in charge of institutional work at Lewis Institute, Chicago, then gave a paper in which she discussed the opportunities for, limitations of, and necessary conditions for institutional courses in high schools. Miss Julia Tear of Hyde Park High School gave a talk on Textile Testing for High School Girls; and was followed by Miss Agnes Hanna of the University of Chicago, on Drafting of Dress Patterns—the values secured

by teaching drafting, the extent to which the girl will be likely to utilize such instruction in after life, etc.

At the Saturday morning meeting new officers were elected for the 1915 meeting: Miss Agnes Hanna, University of Chicago, chairman; Miss Emma Conley, vice-chairman; Miss Minna C. Denton, Ohio State University, secretary. The speakers were Mrs. W. S. Hefferan, vice-president and chairman, Parent-Teacher Committee of National Congress of Mothers of the National Education Association, who spoke on Attitude of the Home toward School Home Economics, and who urged teachers to educate girls to simpler standards of living; Miss Grace Schermerhorn, Iowa State College, Miss Abby Marlatt, University of Wisconsin, and Miss Emma Conley, Wisconsin supervisor of domestic science, who gave an account of various methods used by Home Economics teachers in different parts of the country, to secure coöperation with the home, to encourage home work by pupils, and even to give school credit for this home work. Miss Louise Stanley of the University of Missouri told of Home Project work in Southern High Schools as she has seen it in a recent visit. That these topics were of great interest to the audience, was manifested by the disposition shown to ask questions whenever opportunity occurred.

Some further addresses of interest to Home Economics teachers were the Place of Home Economics in Secondary Education, by Miss Van Rensselaer of Cornell University, given at a general meeting of all sections on Friday morning; What Chemistry Should a Girl Have Who Expects to Teach Domestic Science? by Professor Ashman of Bradley Polytechnic, Peoria, Ill., given before the chemistry section; Methods of Connecting the Teaching of Physics with Phenomena Observed Outside the School.

A moving picture exhibit and lecture were given Saturday afternoon at the First National Bank Building, showing manufacturing processes for various silk and cotton textiles, to an audience of forty teachers.

Standardization of Home Economics Courses. The following resolutions were submitted by the Committee on Education of the District of Columbia Federation of Women's Clubs October 31, 1914:

Whereas, The value of Home Economics study has become generally recognized, and

Whereas, Investigation shows that Home Economics courses are not sufficiently standardized to be counted as college entrance credits by many of our colleges and universities,

Be it Resolved, That the District of Columbia Federation of Women's Clubs use every effort to secure the standardization of the course in Home Economics as taught in our schools.

FRANCES G. FRENCH, *Chairman*,
ELLEN MARSHALL RUGG, *Vice-Chairman*.